```
From boatanchors@theporch.com Sat Jul 8 22:21:00 1995
From: "Dick Dillman" <ddillman@igc.apc.org>
Subject: 5750 Info
Message-ID: <54501.ddillman@igc.apc.org>
Would someone be good enough to remind me of the "normal" 6 volt
nomenclature for the 5750 tube? Thanks...
Best Regards,
Dick Dillman/WPE2VT
<ddillman@igc.apc.org>
San Francisco
From boatanchors@theporch.com Sat Jul 8 22:21:00 1995
From: "Dick Dillman" <ddillman@igc.apc.org>
Subject: Re: 5750 Info
Message-ID: <65912.ddillman@igc.apc.org>
On Sat, 8 Jul 1995 15:46:33 -0400,
JosephWP@aol.com <JosephWP@aol.com> wrote:
>5750 = 6BE6
Thanx to Joseph and all who responded. I 'preciate it.
Best Regards,
Dick Dillman/WPE2VT
<ddillman@igc.apc.org>
San Francisco
From boatanchors@theporch.com Sat Jul 8 13:21:00 1995
From: jml@spider.lloyd.com (Jim Lockwood)
Subject: RE: 6JB6s & Drake C Line
Message-ID: <m0sUe7i-0010SnC@spider.lloyd.com>
At 05:07 PM 7/7/95 -0500, Scott Turner wrote:
>James writes:
                                                    My question*** I've owned 2
>>
>> T4XB's and the current T4XC and I've never seen greater than about 95 watts
>> output on 10 meters on any of them. I get about 120 watts output on
```

80-20 >>about
>> 100 watts on 15 and 85-90 on 10. What do some of you others get?
>
> 120-130 watts out is about
>what I'd expect on a T4X(B,C) on the lower frequency bands.

My TR-4, with three (blessedly healthy) 6JB6 tubes will tickle 200 Watts out during tune-up on 75M, so I'd conclude that 120 or so Watts out of a T4 is about right.

73,

Jim - km6nk

From boatanchors@theporch.com Sat Jul 8 13:21:00 1995

From: durham@w2xo.pgh.pa.us (James C. Durham)

Subject: Re: Adventures in radio

Message-ID: <199507080120.VAA09063@w2xo.pgh.pa.us>

TOM.A.ADAMS@mail.admin.wisc.edu wrote: (stuff deleted)

- > It seemed that we needed detailed field strength measurements for a whole >network of FM stations, and several TVs.
- > Yours Truly, the New Engineer, was issued a couple of field strength meters, >a State car, and some expense vouchers, and was sent off on what was to be a >15,000 mile trip that went over a month.

(really neat story followed)

Tom,

Un...belieeeeevable!

Alright...you asked for it.... dig this!

Another engineer (Bert) and I were putting on a new AM station. We were both young and we wanted to "show our stuff" (Like you say, the beginnings of disaster)! He was the Chief, I was the assistant.

We had all the equipment, two towers and a building that wasn't done. We bolted all the stuff in the racks out in the manager's 3 car garage at his home, then, when the building was done, we dropped the 5KW Gates BC-5P2 transmitter through the open roof, dropped in the racks (the studios were on the 2nd floor) and hooked it all

up. It was a 2 tower directional and we decided to really impress the consulting engineer by having it all ready when he got there for the Field Strength measurements. We got it all tuned up, lines matched, and phases and currents in the array in the ballpark by the time he arrived (Non-radio folks have to understand that the CONSULTING ENGINEER in the Broadcast biz is a BIG GUY, usually from WASHINGTON DC, that knows *everything*, so we were really trying to impress him. He's sort of like a lawyer/engineer who can "practice before the Commission (FCC) and all that stuff)

Now , you have to understand that putting in an AM 2-tower is not a minor task. We had 120 ground radials on each tower, a concrete base, 4 inch strap from the bases to the tuning boxes, 4 inch strap to the building, and about a 50 ft diameter piece of COPPER MESH around the close proximity of each tower. This was all BRAZED together with a hand torch. Keep this point in mind.

We got it all tuned up, and the consultant came in and started making antenna base impedance measurements on each tower. This is part of the application work. "Hmmmm... these are way too high...44 ohms..short tower like this ought to be around 18 ohms...hmmmm". Tell you what, have the tower crew come back and WELD the sections together." Keep this point in mind.

The tower crew came back, welded the sections together, and the consultant came back with his stuff, measured again..."Hmmmm...still wrong...I just don't see how...AH... I bet there's a guy wire shorted to the tower..."

"Whattya mean...shorted...?" said one of the tower guys, they're connected on purpose!"

"What?!!! , why??"

"Mr Cook told us to do it"...(the manager). Turns out he was a CBer, and someone told him to "top load" the towers to get out further!

Well...after removing the connections from the guy wires..

Anyhooo... it worked! He came in, made some measurements, tweeked a little and basically said "This is good..let's go make the Field Strength Measurements. So, Bert got a meter, I got a meter and we were issued two CB radios to talk back on. It was a symetrical pattern, with 2 nulls. He sent Bert out to a point on the NorthWest null, and me out to a point on the NorthEast null. If you know antenna patterns, these should have been very close to the same number of degrees off the "main bang" as the major lobe is called,

like mirror images.

First he told us, "OK..now I'm going to tune the phases to the exact operating value by you guys telling me when I have the very least signal. So just holler GOING UP or GOING down"...

So..he started tweeking, Bert yelled "GOING UP"...I yelled "GOING DOWN". "WAIT at minute, he yelled, that CAN'T happen! This is a SYMETRICAL array!" One of you is in the wrong place!"

So, after much fooling around, we went to another point on the same radial line (same bearing from the antenna) and set up again, figuring the map was wrong, but wouldn't be wrong twice...Heh Heh...

We tried again... Bert: "GOING UP"... Jim: "GOING DOWN"...!!

Consultant: "OK...everyone back to the building.. I have to think!"

We thought, and we discussed different things that could be causing this, like a resonant water tank, or some such thing, but there just wasn't anything likely in the area. I gotta take credit for this one (humbly)..'cause it hit me..."Hey..you don't suppose one of the towers is in the wrong place?"

"Naw...couldn't possibly...welllll.. Anyone have a compass?"

Someone ran out and grabbed a Boy Scout compass out of their car... "Holy...." it's at least 60 DEGREES off!"

Later on, we found out that the same manager who told the tower guys to top load the tower also hired a cheap surveyor, who , if he'd asked around town, he would have found out was a drunk...and the guy had decided, when given the plans of the plot of ground where the antennas were to be layed out, had decided that there was some mistake because they WEREN'T PARALLEL TO THE ROAD! So, he fixed them!

SO...now you remember all the copper mesh, brazing, 4 inch strap and the WELDED towers! Ah..yup...had to move one about 60 feet, put in a new ground system...had a *heck* of a time getting the welded tower sections apart...

YOU THINK THIS IS ALL? Huh....

Now we went out and made the real field intensity measurements somewhat like Tom. Yes, I put a hole in my oil pan driving down a West Virginia "road". (Asphalt, turns to dirt, turns to farmer's field with old bridge over creek, turns to dry creek bed with rocks and boulders). Road??? Yes, we went looking for days

for a school that burned down in 1932...(this happened in 1964). But, we basically got them done OK. No horrible adventures like TOm's..

BUT..(ah, you knew there was gonna be one)...

The consultant called me..."Are you sure these numbers are right?" "Yeah...we even checked the meters against each other".
"WAY too high...I don't get it!"

I'll tell this one simply... the same manager had the tower crew put on the extra section they bring with them for emergencies. The towers were 20 feet too high! AM stations are licensed for certain antenna efficiencies..we were too high...He also put the concrete bases up too high, adding to the length... We didn't learn about this until too late...

THIS GUY KEPT HIS JOB FOR YEARS...! Where's the justice?

The figures "magically" JUST MADE it when I read them from the license application later. No reference was ever made to them being TOO HIGH again! (The consultant had had ENOUGH!!).

-Jim D.

From boatanchors@theporch.com Sat Jul 8 22:21:00 1995

From: durham@w2xo.pgh.pa.us (James C. Durham)

Subject: Re: Adventures in radio ...

Message-ID: <199507090249.WAA11793@w2xo.pgh.pa.us>

>Thanks for your BA story! I'm always interested in "AM Radio Lore", being >a MW-dxer of sorts.

>Your comment about "being licensed for particular tower efficiencies" is >of interest. A primary resource for MW DXers is the NRC Radio Log, which >lists power & directionality, but nothing about efficiency. So, if a >station is listed as licensed for "directional, 5KW" power, does this mean >an "effective radiated power of 5KW" or does it mean the transmitter can >pump 5KW into the antenna system? If it's the former, then the NCR Radio >Log info is essentially complete. If its the latter, then there's a big >piece of info that we are missing.

(stuff deleted)

I cc'd this to the BA list, since there may be other interest.

When the "newer" AM stations were put on, say from the 50's and onward, in a lot of cases, generating the maximum signal possible with the rated transmitter power would not allow the station to be "shoe-horned" into a certain location.

There were many towns crying for radio service, but no frequencies open on which to put stations. So, the procedure was to have a consulting engineer "practicing before the Commission", make a detailed study, costing lots of bucks, to see on which frequencies a station could be squeezed in between existing stations on the same and adjacent channels.

The rules were somewhat (a lot?) confusing... to the point that very few people even tried to do their own application work. The amount of signal allowed to be radiated in a particular direction from a particular location depended on what class of station you were going to interfere with with your new station:

ie;

Class 1 = 50kw clear Class 2 = 50kw day, 10 or 5kw night Class 3 = Regional, usually 5KW

Class 4= 250w/1KW local stations

A Class 1 station (KDKA, WLW, WSM..etc, etc), would be protected in the daytime to it's .1mv contour. In other words, you would draw a circle around the Class 1 station's location at the distance where the signal was .1mv on 1 meter of wire. This was a *fur* piece for stations like WABC or WLW . AT THAT POINT, any new station could not have more that .1/20 signal level, in other words, 1/20th of the Class 1's signal. The rules for Class 2's were not as restrictive, I think they were protected to their .5mv/m contour.

I'm a little fuzzy after all these years, but here's the basic idea... You take ,say, a 5kw station. At 1 mile from the antenna you get so much signal if it's nondirectional. This represents a number expressed in mv/m at one mile. I *think* it's something like 600 for 5kw. If you take the same station , make it directional, and take the RMS value of all the signal levels in all different directions, it will add to the same value, say 600...0K? This is a value representing the *efficiency* of the array.

The FCC adopted a number specifying the minimum efficiency allowable. This was dependant on the class of station *you* were. If you were a Class 1, you had to be pretty darned efficient, a Class 4, not so much. But, there was a minimum for each class. To my knowledge, there was no *maximum*. Class 1's sometimes use stacked in phase elements. KDKA is about 5 miles from me. They have two 3/8 waves in phase with a tuning box halfway up the tower. Their efficiency

is *real* good! Hook up any audio amp and put your finger on the input and you get "KDKAAAAAA...PITS....BURGH..."(insert musical notes)

However, people wanting to "shoe-horn" in stations found that they could sometimes do it by using real short towers and just barely meeting the minimum specs. So, you will find that the stations that went on the air later on in time tended to have smaller signals than the old originals. Heaven help you years later if you were the engineer of one of these babies and the ground system started to deteriorate. You had problems!

By the way, directional stations run higher power than non-directional stations, in order to make up for the addtional losses incurred in the extra tuning units, etc. It was 5% for a 5kw station, but I forget the values for other classes.

So, to answer your question, Heck yes, AM stations of the same power vary a *lot* in actual signal, not allowing for directionality, which is a given.

You can get radiation patterns for all the AM stations from the Comish. I believe they are available on the internet also as a database.

Nightime is a whole 'nother ball game. At night, you have to take into account the *vertical* angle of radiation from the array in your application work. I believe there were actually stations put on the air with resistors in series with their towers. They used tall towers to hold the angle of radiation down so they wouldn't skip out at night, but these radiated far too well in the daytime, so they put in resistors to cut down the daytime signal. Wierd?

There's gotta be someone in this group who's worked for a consulting firm. They could give you more authoratative answers, but that's the gist of it...

73 Jim, W2XO

From boatanchors@theporch.com Sat Jul 8 22:21:00 1995

From: Henry van Cleef <vancleef@bga.com> Subject: Re: Advice wtd stick p.i cores

Message-ID: <199507082300.SAA06686@zoom.bga.com>

As Roberta J. Barmore said

```
> Hi, Bill et al!
    Stuck cores in coil forms? Very common--there's beeswax or something
>
> on 'em and it's *supposed* to hold the slugs in place pretty well...but it
> gets rock-hard over time.
    The old trick is to use a soldering iron to heat them up. That will
> usually free them up. Some of my sources have also suggested a drop or
> two of WD-40 (just a *little!*) allowed to soak in well before applying
> heat will help, but I don't know for sure about it and would suggest great
> caution with any oil or solvent. (Hank? Barry? What's the Inside Word
> on oily slugs?) (ick!) :)
The only thing I know of (and I'm not the resident wizard on this) is
to keep them dry and use some heat to see if you can't break the slug
free of the coil form. A lot of these are in paper forms, which means
you don't want to slosh them with anything. Bobbi's suggestion of
using a soldering gun to heat the slug and make it exand in the form is
the only thing I know of that might work. If wax is making them stick,
it will melt with some heat as well.
******************
Hank van Cleef vancleef@bga.com vancleef@tmn.com
******************
From boatanchors@theporch.com Sat Jul 8 13:21:00 1995
From: Robert2039@aol.com
Subject: Re: Am I nuts?
Message-ID: <950708125307 28184120@aol.com>
In a message dated 95-07-05 17:46:00 EDT, you write:
>johnmb wrote:
>>PS: You should have seen the moving rep counting my BA gear
>>Monday morning. ("19, 20, 21.... 27 radios, correct?") . Interestingly,
>>he said the last ham he moved had a key collection totalling over 100.
>
>The last two times that I moved, to Ireland and back, my collection of about
>80 radios (more broadcast than BA though) sat in storage for the time that I
>was out of the country. I brought another dozen back from Ireland to add to
>the collection. I really was itching to get them unpacked but it ended up
```

>taking me three months to get display space and a workshop set up before I
>could complete the unpacking and to finally be able to get the car in the
>garage.
>
>Larry Kenan
>
>

Kinda reminds me of my huge (about 10 thousand disks!) record collection. It
takes quite a while to pack & unpack that as opposed to my small collection
(about 50) BA's and other tube type shortwave radio's that I can set back up
in about a day or two instead of a couple of weeks!

From boatanchors@theporch.com Sat Jul 8 22:21:00 1995
From: Henry van Cleef <vancleef@bga.com>
Subject: Re: ANTIQUE AUDIO - Austin, Texas
Message-ID: <199507082254.RAA06451@zoom.bga.com>

As Steven Wilson said

>

> Does anyone have the current telephone number ? The 512/467-0304

> comes up as no longer in service. thanks de stan ak0b

>

I was told by, I think, one of the people at Tinkertronics here in Austin, about a year ago, that this outfit had closed down completely. I have no idea what became of what they had. Anyway, they're history.

- -

From boatanchors@theporch.com Sat Jul 8 22:21:00 1995 From: lakeith@wrdis01.robins.af.mil (Larry Keith) Subject: Atlanta Hamfest *will* have a Bone Yard! Message-ID: <199507090013.TAA03189@wrdis01.robins.af.mil>

For those of us who will be at the Atlanta hamfest:

There will be a Bone Yard at the Atlanta Hamfest. Gene (of Military Marketing fame) is one of the guys who will run it.. Same place as last year..

That means that I don't have to hand truck my stuff inside!! Good deal. See you, there, Jack!

Larry, KQ4BY

From boatanchors@theporch.com Sat Jul 8 13:21:00 1995

From: howellh@acad.winthrop.edu

Subject: Blackout II

Message-ID: <95070808390520@acad.winthrop.edu>

WINTHROP UNIVERSITY Electronic Mail Message

Date: 08-Jul-1995 08:37am EDT

From: Haney Howell HOWELLH

Dept: Mass Communication

Tel No: 323-4534

TO: Remote Addressee (_smtp%"boatanchors@theporch.com")

Subject: Blackout II

My blackout description is of the 2nd one. 1977? Brain cells getting tired.

Haney/NO2N/4
<howellh@winthrop.edu>

From boatanchors@theporch.com Sat Jul 8 13:21:00 1995

From: wkleros@csn.net (Bill Kleronomos)
Subject: EFJ Ranger Neutralization

Message-ID: <199507080233.AA18926@ns-1.csn.net>

John, WA1HNL mentioned that the Ranger has no provision for neutralization of the final. John, actually, it is neutralized after a fashion (or stabilized) with the use of that hokey-looking wire that runs from the PA tuning cap down to the cathode pins. There is apparently enough out-of-phase RF fed into the cathode from the PA tank to calm the amp down-more or less. The existing cathode bypass disc ceramics are part of the deal too, perhaps acting as sort of a proportional voltage divider- once while experimenting I radically increased their value and the PA took off on the slightest provocation.-. At best, you probably noticed that this stabilization scheme only partly works: on the higher bands plate dip doesn't coincide with max output, but it won't readily fly, either. Maybe this simple, capless scheme didn't work with three parallelled finals because of their larger total feedback capacitance- who knows...but it sort

of works with one tube...73, bill

"Peak the grid, dip the plate, dive right in- don't hesitate!"
- de KD0HG/AAR8CC, ex WA90ZC
CE: KBC0 AM 1190 KC & KBC0 FM 97.3 Mhz

From boatanchors@theporch.com Sat Jul 8 13:21:00 1995

From: fgilmore@woodtech.com

Subject: Re: EFJ Ranger Neutralization

Message-ID: <199507081516.KAA17537@gxl.woodtech.com>

In reference to Viking Ranger's poor method of neutralization....this was an ongoing

battle between we who sold and had service warrenty contracts vs the company. They

argued it would raise the price considerably to put a proper neutralizing capacitor

system in because the mechanical structure of the final area would have to be completely redesigned.

So we put up with the nonsense. A nearly perfect transmitter (for it's day) with such

a botched up engineering problem!

We also asked for, but never received, a method of reducing the tuning speed of the VFO....adding a proper spotting switch....(a magazine article did this with a cute

capacity loop wire that went around the knob and when you reached up to adjust the VFO it went into spot mode)....and beefing up the cheap function switch that had such a high fail ratio. Oh yes....and learning to mix paint so it didn't chip when you used a feather duster on it.

They ignored us so at conventions we would grumble and mutter and generally raise hell with the reps they sent down to man their booths....and all it did was let off steam.

Oh yes, add to the list of dealer gripes the absolutely rediculous relay connector on the back that probably shocked the daylights out of more hams than any single factory

foulup. And of course it wasn't just on the Ranger. They said it was cheap. That is was.

73, Frank de KOJPJ ex-W5PVX ...-.-

From boatanchors@theporch.com Sat Jul 8 13:21:00 1995 From: Fire Bottle archive handler <firebotl@jackatak.theporch.com> Subject: Email directory for the BA list Message-ID: <9507072007.aa14312@jackatak.theporch.com> William Hawkins <bill@texan.frco.com> wonders: > Sounds like it might be a good idea to have an email directory for this > group. Then, if I had to live with a sysadmin who didn't know what the > Internet mail headers were there for (or which ones were important), then > I could go look up an individual reply address. Gee... what a concept: a sys admin who has a clue about email headers! YEOW! (If you find a few, let me know, 'cuz recently things have not been uphill bound...;^) > Does it already exist, Jack? Yes, in a fashion it does... *HOWEVER* most of ya'll, when you subscribed thought the instructions to subscribe boatanchors <your name> meant heave your email address in place of name... That speaks to me of a craving for anonymity, and I have been too busy chasing my tail to do anything about it. The list parameters were set up to mirror the "old way" everyone was used to dealing with at mit.edu, and we just concealed everyone as the default... We could change it, but I'd rather have those who want to play make the change (listproc@theporch.com I've been a tad stretched the last few days, and it won't be better this weekend, but I'll try to look in from time to time...;^) 73 Jack, W4PPT/Mobile (75M SSB 2-letter WAS #1657/#1789 -- both all mobile! ;^) - - - BoatAnchor Mailing List Archiver/Owner - - firebotl@jackatak.theporch.com - "Plus ca change, plus c'est la meme chose"

From boatanchors@theporch.com Sat Jul 8 13:21:00 1995

From: DUBE2@delphi.com Subject: Fisher 400C

Message-ID: <01HSLWS8AN2Q9AOVAV@delphi.com>

anyone have schematic/manual for a Fisher 400-C Master Audio Control amp?

Thanks

<dube2@delphi.com>

From boatanchors@theporch.com Sat Jul 8 22:21:00 1995

From: HAMRLUND@aol.com

Subject: FS: AHHHH, NEW TRANSISTORS

Message-ID: <950708143404_110569761@aol.com>

I recently bought out what was left of an old radio station, and they had (the enginers) the following in stock:

- 3 MC14538 CHIPS
- 2 MC14555 CHIPS
- 2 SM8632 CHIPS
- 1 SM8616
- 1 SK9068 / 8504
- 7 SK3444
- 2 SK9012
- 1 SK9441
- 1 SK3524
- 3 SK6V2 / SK3058
- 2 SK3024
- 4 2N6288
- 8 2N3055
- 2 NSPN 3569
- 2 2N3569
- 2 2N3741
- 24 2N3906 PNP
- 1 SK3859
- 2 PE4002
- 4 SE4010
- 2 2N4214
- 4 2N4241
- 5 2N4355
- 16 2N3904 NPN
- 5 2N4400
- 2 2N6344
- ? MICA WAFERS MNT. KITS
- 1 GE 61
- 1 ECG 297
- 1 SK3858
- 4 613 / JE802
- 4 TR 05
- 4 MMPS U01

```
1
     TR 26
```

- 2 2N44
- 2 MMPS U45
- 4 TIP 54
- 2 ECG 81
- 1 TIS 93
- TIS 97 2
- 1 TIS 92
- 3 NSD 102
- 1 SK3866A
- 1 TCG 128
- TCG 129 1
- 5 ECG 129
- 3 ECG 152
- 1 ECG 159
- 2N175 6
- 2 2N214
- 8 MJE 1090
- 4 MJE 1100
- 3 2N1613
- 2 RS2019
- 2 RS2020
- 2 RS 2027
- 1 RS2029
- 2 2N2270
- 2 2N2222
- 5 2N2328
- 2 2N2369
- 2 2N2431
- 2N2631 1
- 14 2N2905
- 13 2N2907
- 2962 6
- 4 2982
- 10 MJ 2955
- 1 SK 3003
- 1 SK 3004
- 1 SK 3025
- 1 SK 3026
- 3 SK 3124 SK 3466 2
- 3 SK 3444

And a small envelope with 8-12 of 3 or 4 misc. numbers.

Thats all there is to this list. If you see anything you can use make me an offer, as I have no idea what these things are worth.

Robert Fowle Jackson, Mich. 517-789-6721

From boatanchors@theporch.com Sat Jul 8 22:21:00 1995

From: WaltN@aol.com

Subject: FS: BC-348-Q and other military radio gear

Message-ID: <950708170922_28400503@aol.com>

The following military gear is available from a friend:

BC-348-Q: Excellent+ condition with dynamotor and mount \$160

BC-348-0: Some modifications incl. AC supply, cosmetically nice \$60

ARB: Navy receiver, excellent \$85

RBS: Navy shipboard receiver with built-in AC supply, excellent+ \$85

SCR-274N and AN/ARC-5 command sets--list available

Collins ART-13 xmitter with mount and original manual, DY-17 dynamotor with

mount \$250

Much military accessories, manuals, meters, etc.

Call Henry Engstrom 707.544.5179, not poster.

From boatanchors@theporch.com Sat Jul 8 13:21:00 1995

From: Steve Ellington <n4lq@iglou.com> Subject: FS: R390/URR PRICE REDUCED

Message-ID: <Pine.SOL.3.91.950707223654.4191A-100000@iglou.iglou.com>

COLLINS R390/URR

Has both meters
Works on all bands and modes
Mechanically sound
Front panel in good condition
No covers

Price reduced from \$375 to \$225 for quick sale. Will ship if u pay.

Steve n4lq@iglou.com

From boatanchors@theporch.com Sat Jul 8 13:21:00 1995

From: jml@spider.lloyd.com (Jim Lockwood)

Subject: Gonset trivia

Message-ID: <m0sUe7Z-0010SkC@spider.lloyd.com>

Good morning, Gang,

In the course of an early morning QSO today I ran into a fellow named Glenn who worked for the Gonset company from 1953 until 1960. He told me some interesting things that, since they were new news to me, I thought might be news to many/most/all here.

One of my BA interests is the GSB-100 transmitter and I have three of the critters. One from very early production, one from mid production, and one from late production.

This morning I learned that the very, very earliest GSB-100s, numbering exactly 10 total, included provisions for operating on 11M. So, if you ever see one of these with an 11M position on the bandswitch, you are looking at a mighty rare boatanchor.

Another thing he told me, which everybody on the planet but me may have already known, is that Herb Johnson who started Swan, was a former Gonset employee.

And finally, if you see a GSB-100 that has on its chassis an inspection marking that consists of the letter G inside a circle, that GSB-100 is one of the ones that Glenn himself inspected before it was shipped out the door.

So, in a nutshell, that's what I learned this morning. I think it's neat to talk to people who were actually involved with these old radios and to learn their perspective on the BAs we now cherish.

73,

Jim - km6nk

From boatanchors@theporch.com Sat Jul 8 13:21:00 1995

From: David Barts <davidb@scn.org>

Subject: Re: LF/VLF reception

Message-ID: <Pine.SUN.3.91.950707205105.18788A-100000@scn>

One thing you're sure to be able to pick up in the LF band in North America are aircraft beacons; in fact, they're about the only thing I _can_ pick up. They repeatedly transmit their ID in slow Morse code using MCW. Some of the fancy ones broadcast runway and weather conditions in

There don't seem to be as many of these as there used to be, however. Kind of miss the BF beacon on Magnolia Hill in Seattle; at 520 kHz you could receive it on most AM BCB radios.

David W. Barts (davidb@scn.org) REAL radios glow in the dark.

From boatanchors@theporch.com Sat Jul 8 13:21:00 1995

From: wkleros@csn.net (Bill Kleronomos)

Subject: Link 11

Message-ID: <199507080552.AA21996@ns-1.csn.net>

>Stan, K8RPA asks,

>>I've been reading in Jane's Military Communications about various models of the R-1051 receiver being used in Link 11/Tadi 1A communications. Does anyone out there know what this refers to (as long as it isn't classified?)

>Link-11 was used with the R-1051, T-827, AM-3924 and related comm's gear. It was and still might be in active use. Link-11 is part of a crypto system for secure NATO communications. It featured the use of QPSK (quadurature phase shift keying) of a carrier to to transmit intelligence over the air. Of special interest to military and BA radio nuts and SWLs is that the on-air sound is much like that of your standard computer modem running at 14.4 KBPS. This system relied on the presence of highly phase stable and quiet synthesizers and reference oscillators in the radio equipment. No further information is available. 73, Bill (wkleros@csn.net)

"Peak the grid, dip the plate, dive right in- don't hesitate!"
- de KD0HG/AAR8CC, ex WA90ZC
CE: KBC0 AM 1190 KC & KBC0 FM 97.3 Mhz

From boatanchors@theporch.com Sat Jul 8 13:21:00 1995

From: Fire Bottle archive handler <firebotl@jackatak.theporch.com>

Subject: Maybe this is funny (or sad, or ...)

Message-ID: <9507080741.aa00941@jackatak.theporch.com>

> I've heard mention of the term "telegraphy" more than a few times Hmmm. If my Latin still works, must mean pictures from a distance...

```
> This still does not answer my question,
> what is telegraphy?
Just wait until the chap finds out that telegraphy has NOTHING to do
with transmitting graphics or visual phenomena, and is really auditory
beeping or clicking that communicates meaning, much like jungle drums.
You can almost see him, hunched over a drawing of a new Vibroplex,
trying to figure out how you get the image in there! ;^)
(Could resist... been up too long!;^)
- -
73
Jack, W4PPT/Mobile (75M SSB 2-letter WAS #1657/#1789 -- both all mobile! ;^)
            - - - BoatAnchor Mailing List Archiver/Owner - - -
firebotl@jackatak.theporch.com - "Plus ca change, plus c'est la meme chose"
From boatanchors@theporch.com Sat Jul 8 13:21:00 1995
From: dnorris@gn2.getnet.com (Dean Norris)
Subject: Re: More time/freq stations
Message-ID: <199507081522.IAA27903@gn2.getnet.com>
>>I realize this is out there on the fringe. Yet the friend who told
>>me WAS there at the station and is probably the last guy I can think
>>of who would make up a story like this.
>>Has anyone else heard this one?
>I hadn't heard *that* one, but KDKA and KYW did it in the 60's!
>This was when KYW was in Cleveland (Now there's a story..the KYW
>move from Philly to Cleveland and back..but..another time)..
>Anyhow, I was a young radio engineer dude in the 60's and I made a
>point of visiting all the transmitter plants in the Cleveland area
>when I was working at WGAR. I went to KYW and got a tour by their
>xmtr op. At some point he pointed to a TTY sitting in the corner,
>and explained that they were sending TTY to KDKA by exactly the
>method you mentioned. So, I tend to believe your story about
>WABC. I later confirmed this with the KD folks here in Pittsburgh.
>I can't remember the purpose, however...
>Dan Ingramme.... "Ladies and Gentlemen...at this moment more people
>are listening to the Dan Ingramme show on WABC than any station
>in the *world*". Wow, that was impressive!
```

> >-Jim D.

One of my "elmers" was Andy Woolfries, WODSP in Sioux City, Ia back in the 50's. He was one of the original engineers at WOI in ?Ames? Ia in the early days. Supposedly WOI was the second commercial stn, after KDKA. Does anyone have any info abt Andy? He was a truly neat guy and as a hi-school electronics teacher, and CW guru (wouldn't allow AM/SSB operation unless you were very proficient in CW) he got a large number of guys going in radio. '

WOWDK, KODON (me), KODPF,G,H,J, WOYSE and a bunch others. Any of you guys arn'd?

cdn

From boatanchors@theporch.com Sat Jul 8 13:21:00 1995

From: wkleros@csn.net (Bill Kleronomos)

Subject: More-Re: R-390A product detector mod. Message-ID: <199507081649.AA03378@ns-1.csn.net>

Sri about excessive bandwidth!

I neglected to mention on my previous post-- if one uses the switched audio relay option I suggested, the 6BE6 product detector/BF0 will need to get its switched B+ via a second section of the added relay....if a DPDT reed relay with adequate ratings can't be found, try finding a mil or commercial surplus minuature sealed can-style relay. Or, a small power MOSFET with a couple hundred volt rating could be used for the power switching function driven off the same switched low voltage B+ (haven't tried it myself- oughta work- will require s'more R&D!).....Bill

"Peak the grid, dip the plate, dive right in- don't hesitate!"
- de KD0HG/AAR8CC, ex WA90ZC
CE: KBC0 AM 1190 KC & KBC0 FM 97.3 Mhz

From: howellh@acad.winthrop.edu

Subject: NY Blackout

Message-ID: <95070808250086@acad.winthrop.edu>

WINTHROP UNIVERSITY Electronic Mail Message

Date: 08-Jul-1995 08:07am EDT

From: Haney Howell

HOWELLH

Dept: Mass Communication

Tel No: 323-4534

TO: Remote Addressee (_smtp%"boatanchors@theporch.com")

Subject: NY Blackout

I was the Charge Editor at the ABC Radio Network the night of the blackout. About 9:34 we noticed the lights starting to dim and everything crashed at 9:35 on the West Side (ABC was at 66th and Broadway then... world's largest radio network over a shoe store...). WCBS was the only station with audio. How did we cover the story? Reporters on the street with tape decks, others simply looking out the 6th floor window and the intern in the corner with a radio, writing down everything News88 had to say!

We had a generator on the roof but no fuel. Fire marshall forbad the storage of such. Desk assistants hit the street with a jerrycan. Using the finest high tech techniques, they shoved a hose in the first car with an unlocked gas tank. Just as the gas started to flow, the late Bill Steward and an ABC tevision crew looking for looting stories lit up the scene! "Why are you stealing gas", he demanded? "For ABC?", came the feeble reply. The generator kicked in and we were able to insert the commercials from New York while Washington took over the newscast.

Perhaps another list member can confirm this story. I heard later that an intern or young tech at WCBS was actually reading the meters and noticed the fluctuations in the system. They went to backup at the studio either before or just after the crash.

Finally, we were able to crank out copy and feed material to Washington because of the typewriter! Wonder how they'll handle the next one when all the terminals crash? Yes, there will be another one!

BTW, the ABC Network newsroom was crawling with hams in those days. A few remain. Bob Hardt is K2NX. When we met, he invited me to his NJ home to view "Big Betha", a BA he'd built from scratch. It's still somewhere on Long Island. I later bought the Ranger II that drove it. Beautiful box which I foolishly let get away.

Haney/NO2N/4 No tonight
<howellh@winthrop.edu>

From boatanchors@theporch.com Sat Jul 8 22:21:00 1995

From: "Dick Dillman" <ddillman@igc.apc.org>

Subject: Preliminary Foothill Report
Message-ID: <54519.ddillman@igc.apc.org>

I spied the following BA receivers at today's Foothill (California) swapmeet:

Hallicrafters S-38B \$ 85 National NC-300 250

Collins 51S-1 650 - Originally a 28VDC set, had "Air Force"

120VAC power supply installed.

Hammarlund SP-600-JX-17 225 - This beauty, ex-KB0JPQ, went home with me

for a negotiated price (Thanx, Marc).

Best Regards,

Dick Dillman/WPE2VT
<ddillman@igc.apc.org>
San Francisco

From boatanchors@theporch.com Sat Jul 8 13:21:00 1995

From: "Tony Stalls (K4KYO)" <j38@clark.net> Subject: Re: R-390 Cabinet Saga, Vol. 2

Message-ID: <Pine.SOL.3.91.950707221050.21371D-100000@clark.net>

On Fri, 7 Jul 1995, johnmb wrote:

- > On Fri, 7 Jul 1995, Tony Stalls (K4KYO) wrote:
- > > expensive and less snazzy one thinking that I can "clean it up" for the
- > > difference in price. BIG mistake gang!!
- > Tony, I have encountered this problem several times (Hey, Im a slow
- > learner! :-)) on cars... It is almost a Universal Truth that it is cheaper
- > (and quicker!) to start with as good a "core" as you can afford to start
- > with, rather than thinking one can save money by being frugal on the
- > outset...

Wise words! I just hope that I remember them next time. ;-)

73, Tony K4KY0

From boatanchors@theporch.com Sat Jul 8 13:21:00 1995

From: Steven Wilson <randyw@crl.com>

Subject: R-390A and SSB

Message-ID: <Pine.SUN.3.91.950707201846.16562A-100000@crl12.crl.com>

Have you modified your 390A for SSB ?

I am looking at the 6BE6 mod from CQ in the 50's. I am not a purist so can see nothing wrong with a good solid state product detector either. (I did the IC product detector to my R4C 15 yrs ago and it still sounds good.)

So what have you tried? I am in the final stages of the ER audio modification so still need to do the product detector for SSB. I do not want to destroy the fine AM qualities. A small relay to switch detectors should take care of that. I also do not want to do an external detector, however, using the IF out and then jumping back into the R-390A audio module does make sense.

suggestions welcome.

P.S. Anyone have a boneyard condx R-390A that they would sell a few mechnical parts off of. ? I need the BFO stop and a Oldham for the PTO. I obtain a basket case unit that I am restoring and seems some of the mechnical parts disappeared in the past. Like tube shields, those little collars that hold the xtal switch gear and large knobs and of course the large knobs. Appears that someone removed the front panel and did not keep some of the necessary items. most of the electrical is ok was just missing the PTO, got one of those with half (1/3) of the coupler.

de stan ak0b

From boatanchors@theporch.com Sat Jul 8 22:21:00 1995

From: Steve Ellington <n4lq@iglou.com>

Subject: R390/URR SOLD

Message-ID: <Pine.SOL.3.91.950708203126.7984A-100000@iglou.iglou.com>

The R390 I listed is now sold. Thanks 73

Steve n4lq@iglou.com

From boatanchors@theporch.com Sat Jul 8 22:21:00 1995

From: Jim Specht <specht@test.rb.unisys.com>

Subject: R390A Knobs

Message-ID: <9507082228.AA25065@tedb>

I need to refinish three knobs on my 390A...one is a replacement (seems to have a flat black instead of gloss black finissh) and the other two are almost completely missing the paint. Has anyone done this? What paint type (&etc) is suggested? Any inputs appreciated.

From boatanchors@theporch.com Sat Jul 8 22:21:00 1995 From: rblank@legend.txdirect.net (Richard A. Blank)

Subject: Re: R390A Knobs

Message-ID: <9507090033.AB23778@legend>

>I need to refinish three knobs on my 390A...one is a replacement (seems >to have a flat black instead of gloss black finissh) and the other two >are almost completely missing the paint. Has anyone done this? What paint >type (&etc) is suggested? Any inputs appreciated.

I take the knobs that I want to refinish and soak them overnight in paint remover and the next day scrub them with Scotch-Brite (tm) and Dawn(tm) dishwashing liquid.

I have a bunch of 3/16" bolts pushed up thru stiff cardboard that I use to support the knobs for painting and holding while they are baked in the oven which makes the following steps easier:

I then take Krylon(tm) Clean metal Primer and spray a light coat on the knobs. After that has dried for an hour or so, I'll spray on Krylon Semi-Flat in 3 light coats with about 10 minutes between coats. After letting them dry overnight or for a couple of hours in a warm (175 deg F) oven, I'll fill in the indicator lines with Flat White Rustoleum (from a can) and wipe off the excess with a rag barely dampened with mineral spirits...

If you are going to do any knobs at all, you might as well do them all, as it takes only a little more effort to do them all...and if you do the meter covers and the Veeder-Root counter window at the same time, the result is a very impressive looking face with all the black parts having a matching lustre....

I get a lot of comments on my "new" R-390/URR receiver and I feel that with an engraved front panel unit at least, one can really make these units look like new again....

I hope to hear more about the gent who was getting paint chips in differing shades of grey....I have a couple of R-390A's and one R-390/URR that have a different front panel color from the R-390/URR that I cosmetically restored... the R-390 I have in here now has a grey that looks like the grey that Navy and Air-Force equipment was painted, Krylon's Soft Shades Dove Grey matches this grey almost exactly, the other radio's grey is darker...this shade of grey is also different from the SP-600JX-17 or SPC-10....

Just my thoughts on the radios....

Rick Blank, KI5SL

From boatanchors@theporch.com Sat Jul 8 13:21:00 1995

From: wkleros@csn.net (Bill Kleronomos)

Subject: re: R:390A and product detector mod- errata!

Message-ID: <199507081553.AA02627@ns-1.csn.net>

Stan, AKOB asked for feedback on the R-390A product detector mod (using a 6BE6 as a self-excited product detector) as first published in the 1/68 CQ and developed by Cptn. Paul Lee, USN, W3JHR. There was also a knockoff of this design published in ER a year or two ago

Both detector designs, if built as published, WILL NOT WORK CORRECTLY! Both input excessive 455 Khz IF signal to the 6BE6; when built using the component values specified the detected audio will be distorted due to an overloaded 6BE6.

The solution is to reduce the carrier input to the mixer tube. If using a 5 pf coupling capacitor to pin 6 of V506B as the IF signal pickoff as Capt'n. Lee suggests, then the resistor from the signal grid (pin 7) to ground of the 6BE6 must be greatly reduced in value from the 11 K specified value. I recommend a value from 1.2K to 2.7K. At 2.7K the detected audio from the product detector almost perfectly matches that of the AM diode detector (no apparent volume change on a zero-beated AM signal when detectors are switched). Using the lower value slightly reduces the detected SSB audio but it's extremely clean.

I'd also suggest those doing this mod consider switching the audio between detectors through the use of a tiny relay installed in the IF chassis switched by the existing front panel BFO switch--instead of replacing said switch and routing new audio wires over to it. This wil also allow the subsequent swapping of IF chassis for test purposes. In my own receiver I used a half-wave rectifier & filter cap off the 6.3 volt line to provide DC for one coil lead of a small SPDT reed relay, the other lead is "grounded to activate" via the existing BFO-ON switch. Just clip the one wire at the switch that has continuous B+ on it (and heat shrink or tape well) and ground that terminal of the switch. This will provide a switchable ground back to the IF chassis through the existing wire (instead of switched B+).

Never saw a subsequent errata msg. published in CQ or ER. Don't know why; I've had to 'fix' three R-390As now where the user complained about raunchy SSB audio. Done correctly, the mod sounds great, is reverseable, and is well worth doing.....Bill

"Peak the grid, dip the plate, dive right in- don't hesitate!"
- de KD0HG/AAR8CC, ex WA90ZC
CE: KBC0 AM 1190 KC & KBC0 FM 97.3 Mhz

From boatanchors@theporch.com Sat Jul 8 13:21:00 1995

From: k1zat@bah.com

Subject: Re: Rack rails for R390A?

Message-ID: <Pine.SUN.3.91.950707221044.25012A-100000@booz.bah.com>

On Fri, 7 Jul 1995 rolfe@DUETTO.LDP.COM wrote:

- > Well, I was hoping for a solution that would make ingress and egress a
- > little easier, but I may resort to the obvious solution you suggest
- > I'm still wary of supporting anything as heavy as a 390A with only the
- > front panel though.

Don't worry about it. I've been in places where there were 100's of R-390's, two to a rack, held in the racks with nothing more than the front panel screws. I've had mine in a RR-197 rack for close to ten years with jsut four screws.

jd

From: "Tony Stalls (K4KY0)" <j38@clark.net>

Subject: Re: Rack rails for R390A?

Message-ID: <Pine.SOL.3.91.950707221422.21371E-100000@clark.net>

On Fri, 7 Jul 1995 Michael.J.Knudsen@att.com wrote:

- > I bet the surplus salvagers who pulled R390As out of racks just sent
- > that extra hardware (maybe the whole rack cabinet) to the scrap dealer,
- > figuring nobody would want it enough to justify the storage space. 73,

My experience with salvagers is that they're after the quick buck and don't want to be bothered with the small stuff. Citing one example, I spoke to a dealer I knew at the Richmond Frostfest earlier that was trying to buy (as I recall) three R-390A's. I knew him to be a computer and parts dealer and I asked him why he wanted them and he replied that he was going to strip out the filters and junk the rest. I told him about mine and how much I had paid Rick Mish to work his magic and his jaw dropped.

From boatanchors@theporch.com Sat Jul 8 22:21:00 1995

From: k1zat@bah.com

Subject: Re: Rack rails for R390A?

Message-ID: <Pine.SUN.3.91.950708142933.13485A-100000@booz.bah.com>

Morning Rolfe -

On Fri, 7 Jul 1995 rolfe@DUETTO.LDP.COM wrote:

- > I was really looking for a way to rack-mount the thing in such a way
- > that one person could easily (well, make that *possibly*) remove and
- > replace it without pumping iron for a month in preperation for the
- > job.

One of my friends in Alaska had a simple solution for that, he had one of those "cheap" pump up jacks like you see the auto mechanics use to jack up the front end of a car. They sit on wheels and about 8-10 wide, good for a couple of tons. You could probably find one at Manny, Moe's and Jacks fairly cheap. Put a 2X6 between the jack and the bottom of the 390 lnegth wise and should be in good shape to install it.

One of the things about military tech orders/manuals, they stress the safety part of it, like "two people needed to install" on the 390. They're are some "youngsters" out there that think they can do it singlurly until they read the TO/TM (and some dont read it so they get hurt).

From boatanchors@theporch.com Sat Jul 8 22:21:00 1995

From: HAMRLUND@aol.com

Subject: Re: Rack rails for R390A?

Message-ID: <950708152020_110589967@aol.com>

tHE RAILS YOU SEEK CAN BE HAD FROM :

Premier Metal Products East coast 718-993-9200 west coast 909-829-3089

Ask them to send you their catalog.

price is anywhere from 14.58pr to 20.66pr in actuality you will use either the 14.58 or 15.77pr

CSA-16 14.58 PR 14.25" long fit to 18" deep CSA-18 15.77 PR 16.25" long fit to 18" deep

This company made all the cabinets for Hammarlund..

They just about any hardware for rack systems you'd want..

Robert

From boatanchors@theporch.com Sat Jul 8 22:21:00 1995

From: rolfe@DUETTO.LDP.COM

Subject: Re: Rack rails for R390A?

Message-ID: <9507081949.AA0523@localhost>

k1zat@bah.com writes:

- > Morning Rolfe On Fri, 7 Jul 1995 rolfe@DUETTO.LDP.COM wrote:
- >> I was really looking for a way to rack-mount the thing in such a
- >> way that one person could easily (well, make that *possibly*)
- >> remove and replace it without pumping iron for a month in
- >> preperation for the job.
- > One of my friends in Alaska had a simple solution for that, he had
- > one of those "cheap" pump up jacks like you see the auto mechanics
- > use to jack up the front end of a car. They sit on wheels and about
- > 8-10 wide, good for a couple of tons. You could probably find one
- > at Manny, Moe's and Jacks fairly cheap. Put a 2X6 between the jack
- > and the bottom of the 390 lnegth wise and should be in good shape to
- > install it.

This is a *great* idea -- I'm on my way to Manny, Moe, and Jack's now to pick one up :-).

73,

Rolfe W3VH

- -

Rolfe Tessem | Lucky Duck Productions rolfe@ldp.com | 96 Morton Street (212) 463-0029 | New York, NY 10014

From boatanchors@theporch.com Sat Jul 8 22:21:00 1995

From: durham@w2xo.pgh.pa.us (James C. Durham)

Subject: Re: Rack rails for R390A?

Message-ID: <199507090309.XAA11891@w2xo.pgh.pa.us>

One thing you can do is get a one racket unit wide (1 3/4) panel of thick, rugged stock and mount it just below the hole for the heavy unit. This keeps the thing from getting away from you if you slip and crashing to the bottom of the rack. Then get a table, some books, lumber, whatever for spacers and set the unit on the table and lumber or books so it's just slightly higher than the "preventer" panel. Then push it straight back into the rack. Now, go around to the back and insert a proper length 2x4 under the rear of the chassis so that the bottom of the panel comes in and gets at least *near* the rack. Then use long rack screws and pull it the rest of the way in. Then remove the "preventer" panel.

Even better than the "preventer" panel is to temporarily mount a rack shelf of the rugged variety (old RCA shelves) upside down just below where you want the heavy unit. Then use the table and shims and push straight back. It will hold it horizontal and you just put in the screws and remove the upside down shelf...

*Don't try to hold it with muscle power...you could lose some toes!

-Jim , W2XO

From boatanchors@theporch.com Sat Jul 8 22:21:00 1995

From: Henry van Cleef <vancleef@bga.com>

Subject: RCA Audio Chanalyst model 170-A info needed Message-ID: <199507082326.SAA07827@zoom.bga.com>

I picked one of these up recently, and on closer inspection, see that it is a unit made for work with audio equipment. There is a build date of Aug 7, 1944 inside, indicating that although it is a 100% civilian design, it was built during WW II, which means that the original owner had a priority for buying civilian electronics---not a consumer service shop or anything like that.

The box has two chassis inside. The lower chassis is a four-stage audio amplifier, with "input" and "monitor" connections, as well as gain controls for each stage (6SJ7->6SJ7->6J5->6V6). Not entirely clear where the 6V6 output goes---there is a speaker and some sort of dummy load that can be turned on and off, but I haven't rung out the wiring yet. The top chassis has a built-in VTVM and an audio oscillator. I haven't determined which tubes go with what function---there's a 2050 gas tetrode in the middle of all this, also a pair of 6K6's that I can't quite figure. I'm about to get out the trusty VOM and start drawing a schematic.

No dice thus far on finding a manual for it. I've tried manuals plus and Puett. Anybody familiar with this box? Anybody got suggestions on finding a manual? It's loaded with tweakable potentiometers, all unmarked, so I might have a bit of puzzle-solving to do to figure out what's what and how to set them.

- -

From boatanchors@theporch.com Sat Jul 8 13:21:00 1995

From: TOM.A.ADAMS@mail.admin.wisc.edu

Subject: Re. WWVB decoding

Message-ID: <F77K2824.F77K2833@mail.admin.wisc.edu>

to: boatanchors@theporch.com

WWVB is on $60~{\rm KHz}$. What's being heard at $100~{\rm KHz}$ (actually, $90~-~110~{\rm KHz}$) is the pulse transmissions of LORAN - A network.

From boatanchors@theporch.com Sat Jul 8 13:21:00 1995

From: Steve Ellington <n4lq@iglou.com> Subject: Re: Ship Shape & Bristol Fashion

Message-ID: <Pine.SOL.3.91.950707210724.14031A-100000@iglou.iglou.com>

On Fri, 7 Jul 1995 Michael.J.Knudsen@att.com wrote:

- > Might not the smartest thing to do be to borrow a Bristol wrench long
- > enuf to loosen all your R390A knobs, remove the splined set screws,
- > and replace them with same thread Allen set screws?

>

- > Then put all the spline screws in a little poly bag and either (a)
- > tape it inside the radio for the next serious collector, or (b) pin
- > it to a potato and use your Spud Gun to blast it out into the cornfields
- > where those screws will never again trouble humankind. 73, mike k

>

Shame on you Mike! You just gave away Hardee's secret to growing those curley fries!

Steve n4lq@iglou.com

From boatanchors@theporch.com Sat Jul 8 22:21:00 1995

From: swheaton@tyrell.net (Sheldon Wheaton)
Subject: Re: Ship Shape & Bristol Fashion

Message-ID: <199507090047.AA16871@www.tyrell.net>

A good source for low cost Bristol or "Spline" wrenches is the McMaster-Carr Supply Company(1). They sell spline keys "Also known as Bristol keys", individually and in sets, short and long arms, as well as screw-driver type handled drivers (\$6 ea., guys like Bill K. ought to have these!). The short handled keys run about \$.60 ea. up to 1/8" dia., and the long ones about \$.75 ea. Sizes are listed by the "major diameter", or the O.D. of the wrench (not the diameter of the socket in the set screw). McMaster has no minimum purchase amount, but you will have to pay shipping.

I have a set of these and they work fine on my R-390A.

The American National Standards Institute (ANSI) covers Spline Sockets (the current preferred name) in their specification B18.3-1986. This is a specification for the drive socket in the set screw. It lists major and minor diameters for 4 and 6 flute spline sockets. The table below lists the "sizes" available from McMaster-Carr, and where applicable, the minimum minor diameter as specified in the ANSI spec (Some sizes available from McMaster are not covered by the ANSI spec). If you don't know what size wrench you need to order, use some gauge pins or drill bits and find the largest pin that will go into the socket on the set screw. Find the nearest size under the "I.D." listed below, and then find the associated "O.D." wrench size. I've listed the McMaster part numbers for reference, since it can be difficult to get a catalog sent out (they are about 2500 pages).

0.D.	I.D.	short p/n	long p/n	sets
4 flut	е			
.033	.026	7048A11	n/a	Α
.048		7048A12	7048A61	Α
.069		7048A15	7048A62	AB
.076		7048A16	7048A63	AB
6 flut	e			
.048	.040	7048A13	7048A64	Α
.060	.050	7048A14	7048A65	AB
.072	.063	7048A17	7048A66	AB
.096	.080	7048A18	7048A31	ABC
.111	.096	7048A19	7048A32	ABC
.133	.116	7048A21	7048A33	BC
.145	.126	7048A22	7048A34	BC
.168	.147	7048A23	7048A35	BC
.183	.161	7048A24	7048A36	BC
.216	.188	7048A25	7048A37	С
.251	.219	7048A41	7048A67	
.291	.252	7048A42	7048A68	
.372	.316	7048A43	7048A69	
.454	.383	7048A44	7048A71	
.595	.506	7048A45	7048A72	

Sets (prices may not be correct):

A - 9 pc. short-arm set \$6.40 p/n: 7048A54 B - 10 pc. short-arm set \$7.56 p/n: 7048A55 C - 7 pc. long-arm set \$11.05 p/n: 7048A56

Disclaimer:

As much as I deserve a comission for this, I am in no way associated with McMaster-Carr corporation. I just know it is hard to find these things!

Footnotes:

(1) McMaster-Carr Supply Company, 600 County Line Rd., Elmhurst, IL 60126-2081 ph: 708-833-0300 fax: 708-834-9427

add'l sales/distribution centers:

Atlanta, GA ph: 404-346-7000 fax: 404-349-9091 Los Angeles, CA ph: 310-692-5911 fax: 310-695-2323

New York City/Philadephia ph: 908-329-3200 fax: 908-329-3772

swheaton@tyrell.net

From boatanchors@theporch.com Sat Jul 8 22:21:00 1995

From: haynes@cats.ucsc.edu (Jim Haynes)

Subject: SSB mod for R-390A

Message-ID: <199507081935.MAA25133@hobbes.UCSC.EDU>

I'm currently fiddling with a mod along the lines of one described in Hollow State News over a period of time. The gist of it is that you don't do a product detector. Instead you do a fast-attack AGC and also greatly increase the BFO signal to the diode detector. "It can be shown that" (which means I don't know how to show it but somebody has done it, and here's what he got) [that line stolen from Dr. Rogers of Electronic Associates] if you put enough BFO into a diode detector, basically lots more BFO than signal, you get pretty good SSB detection. What I'm working with now is a simpler description of the mod than was in HSN, and some differences to make the AGC mod easier to do, because I'm lazy. I'm not finished, but for those who don't want to wait, here is what I'm up to.

- 1. Take out the IF subchassis.
- 2. Locate C535, which runs from pin 5 of the BFO, V505, to a terminal post and winds up at pins 6-7 of V506B diode detector. This is a 12 pf capacitor; shunt it with 47 pf to get the BFO injection up high. The article in HSN says you have to take out the bellows coupling on the BFO shaft; but I just slipped back the sleeving and tack-soldered the added capacitor right across the existing one without having to remove the bellows. Tack-soldering is the key to my lazy method; these parts don't weigh anything, and solder is strong enough to hold them without having the leads wrapped around things or stuck through holes.
- 3. Locate R546, 180K that runs from pins 1-2 of V509A AGC rectifier to a terminal post. Tack a silicon signal diode across this resistor, cathode to V509A pins 1-2 and anode to the terminal post. (I used diodes from Radio Shack sold as 1N914/1N4154). It's important to use silicon here for low leakage.

4. Locate R547, 220K which runs from pin 2 of V506A to a terminal post. Clip this out and tack a silicon diode with cathode to the terminal post and anode to pin 2 of V506A.

All the above is from the HSN modification, and he goes on to replace C551, the big 2uf capacitor with another value and rewire the AGC speed switch so that the integrator function of V506A is disabled. Well you can

5. put the IF subchasses back in now, because the rest of the playing is done at the AGC speed switch.

The HSN article said to take the front panel off for access to the AGC speed switch. Instead

- 6. take the knob and nut off the AGC speed switch, and you won't be able to get it out but you will be able to rotate it up to where you can get to the wires. At this point
- 7a. this is how the HSN article would do it: disconnect and tape the wire from terminal 8 of the switch, the contact that is made in the SLOW position. Move the ground wire from terminal 9 of the switch to terminal 8. Connect a capacitor (value to be determined, maybe about 1.0 uf) between terminals 8 and 9. The result of this change is that in the FAST position you have 0.1uf to ground as always. In the SLOW position you have C551, 2uf to ground. In the MED position you have whatever you get by connecting 2uf in series with the added capacitor. The writer remarks that he discovered the reason for the integrator, that if any of the IF tubes are the least bit gassy they will drain off the AGC voltage faster than you had in mind. Well I guess this is the case with my receiver, because when it was stone cold the AGC attack and release times were about as predicted; but the release time got much shorter as the receiver warmed up. Hence
- 7b. I'm trying to keep the integrator and adjust the time constants with it in the circuit. The trouble is that with the integrator the SLOW release time is way too long to be good for anything, and the attack time is not very impressive either. So, disconnect the wire from terminal 7 of the switch, the arm of the switch, and insert a capacitor, value to be determined, in series between the wire and the switch. If you want to do a neat job you can screw an insulated terminal post somewhere, like maybe on one of the screws of the switch; or you can just let the connection dangle and hope it doesn't touch anything. Disconnect and tape the ground wire from termninal 9 of the switch, the MED positon. Connect a capacitor, value to be determined, between terminals 8 and 9 of the switch. With this circuit the integrator functions all the time in MED and SLOW; the SLOW time is determined by the 2uf C551 in series with the first added capacitor; and the MED time is determined by the result of 3 capacitors in series.

8. When you have the times the way you want them, put the AGC speed switch back in place, and you're done.

The modified main chassis will work fine with an unmodified IF chassis. The AGC timings will be different, that's all. The diodes modification give you fast-attack slow-release AGC that you need for proper AGC action on SSB signals. The added capacitor in the BFO gives you much higher BFO voltage at the detector for fairly undistorted detection. What remains to be learned are the correct capacitor values, and whether keeping the integrator makes any difference in the ability to tolerate slightly gassy tubes in the IF amplifier.

From boatanchors@theporch.com Sat Jul 8 13:21:00 1995

From: jproc@worldlinx.com

Subject: Telegraphic Typewriters

Message-ID: <Chameleon.4.01.2.950707180136.jproc@>

Dear BA's,

While the thread on typewriters is still hot, I would be interested in hearing from anyone who has information about Telegraphic typewriters. These are the upper case only units that were used by anyone who copied CW for a living. I'm trying to locate some of these mills for the ship but haven't had an ounce of luck. When I ask the magical question, the response is always - Youre looking for what????

Did these Telegraphic mills have anything about the keyboard layout? Were they manual or electric? Did they have any distingushing features that made them suitable for telegraphy? So far, all I have been able to find out is the Royal and Remington were two principle makers of these machines, the finish was usually gray crackle and that's about it.

Regards,

Jerry Proc VE3FAB E-mail: jproc@worldlinx.com

Radio Restoration Volunteer HMCS Haida Toronto, Ontario

From boatanchors@theporch.com Sat Jul 8 22:21:00 1995

From: Gary Pewitt <gpewitt@execpc.com>
Subject: Re: Telegraphic Typewriters

Message-ID: <Pine.SOL.3.91.950708143859.17439A-100000@earth>

I remember while in tech school at Keesler AFB in Biloxi in 1963 the didibops (morse intersept operators} used black manual desktop machines. I think they were Remingtons. They were banging out trafic while wearing cans and through noises like airplane engines and catfights. Had more than one nervous breakdown. Lucky I was taking Microwave radio relay school. Too bad I didn't learn the code back then after 11 months of tech school 6 hours a day 5 days a week of nothing but electronics the written test for extra wouldn't have seemed too hard. 73 de N9ZSV

On Sat, 8 Jul 1995 jproc@worldlinx.com wrote: > Dear BA's. > While the thread on typewriters is still hot, I would be interested in > hearing from anyone who has information about Telegraphic typewriters. These > are the upper case only units that were used by anyone who copied CW for a > living. I'm trying to locate some of these mills for the ship but haven't had > an ounce of luck. When I ask the magical question, the response is always -> Youre looking for what???? > Did these Telegraphic mills have anything about the keyboard layout? Were > they manual or electric? Did they have any distingushing features that made > them suitable for telegraphy? So far, all I have been able to find out is the > Royal and Remington were two principle makers of these machines, the finish > was usually gray crackle and that's about it. > Regards, > -----> Jerry Proc VE3FAB > E-mail: jproc@worldlinx.com > Radio Restoration Volunteer > HMCS Haida Toronto, Ontario > >

From boatanchors@theporch.com Sat Jul 8 22:21:00 1995 From: Jeffrey Herman <jeffrey@math.hawaii.edu>

Subject: Re: Telegraphic Typewriters

>

Message-ID: <Pine.SUN.3.91.950708110207.11858D-100000@kahuna>

On Sat, 8 Jul 1995 jproc@worldlinx.com wrote:

- > Did these Telegraphic mills have anything about the keyboard layout? Were
- > they manual or electric? Did they have any distingushing features that made
- > them suitable for telegraphy? So far, all I have been able to find out is the
- > Royal and Remington were two principle makers of these machines, the finish
- > was usually gray crackle and that's about it.

Yes, those typed in uppercase. But there was still a shift key - shifting didn't effect the letters - it only shifted the numbers up to figures. Each positition at the Coast Guard station had two of these mills - one for the radio log, and the other to copy traffic. So at NMO we had 16 of 'em. Guess they all ended up in the dumpster.

The number keys were set up differently than these computer keyboard, Seems on the Wyse keyboard here that the numbers are further to the left than on the CG mills. My fingers still think they're in the Coast Guard, for I'm always hitting the wrong number keys on this thing.

I'd have to be under hypnosis to remember who the manufacturer was of our mills.

Jeff NH6IL (ex NMO CW op)

From boatanchors@theporch.com Sat Jul 8 22:21:00 1995

From: k1zat@bah.com

Subject: Re: Telegraphic Typewriters

Message-ID: <Pine.SUN.3.91.950708194214.21137A-100000@booz.bah.com>

Gary --

On Sat, 8 Jul 1995, Gary Pewitt wrote:

- > didibops (morse intersept operators} used black manual desktop machines.
- > I think they were Remingtons. They were banging out trafic while wearing

They were the MC-88 with a slash thru the zero's and all cap letters. What a machine..

jd

From boatanchors@theporch.com Sat Jul 8 13:21:00 1995

From: Bill.Cohn@precision.chigate.com (Bill Cohn)

Subject: W9CSX SK

Message-ID: <a6b_9507080434@chigate.fidonet.org>

Subject: W9CSX SK

Fellow BA ites,

I meet Marvin Camras at an IEEE consumer electronics group cocktail party several years ago. Since one of my strange likes is collecting old open reel tape machines I knew who he was. I introduced myself and complemented him on his accomplishments. He was very modest and asked me why I would collect those OLD things.

I was very pleased that I had a chance to talk with him.

73 de N9MHT Bill bill.cohn@precision.chigate.com

* OLXWin 1.00a * Join the Antique Radio Club of Illinois

From boatanchors@theporch.com Sat Jul 8 22:21:00 1995

From: Andy Wallace <wallace@mc.com>

Subject: Want and Sale lists

Message-ID: <9507082316.AA10693@jupiter>

You have to praise the Boatanchors list people for helping to shorten forsale and wanted lists!

My RF thermocouple, R-388 dial drum, and WWII phantom antenna have gone into good and (hopefully happy) hands...

BA people, seeing my wanted list, have provided me with some National stuff and further info on my CE 20A exciter. One hardy soul actually gave me the pinout for the Hammarlund Comet Pro coils, so now I can (ugh) start winding!

Put out yer want lists...someone like me just may have that jun ...er, gem!

--Andy

..still looking for the elusive Select-O-Ject.

From boatanchors@theporch.com Sat Jul 8 13:21:00 1995

From: rmccarty@netcom.com (roger mccarty)

Subject: Where to find.....

Message-ID: <199507081635.JAA01607@netcom8.netcom.com>

Hello Folkm

Can anyone direct me to a source of 9 pin, I believe they are called "Loctal" plugs and sockets? Like the 8 pin tube type but with 9 pins. The ones that are used in Johnson equipment for accessory connections.

Any help is greatly appreciated.

Roger KD6CC

From boatanchors@theporch.com Sat Jul 8 22:21:00 1995

From: "Tony Stalls (K4KY0)" <j38@clark.net>

Subject: Re: Where to find.....

Message-ID: <Pine.SOL.3.91.950708163607.5705A-100000@clark.net>

On Sat, 8 Jul 1995, roger mccarty wrote:

- > Can anyone direct me to a source of 9 pin, I believe they are called
- > "Loctal" plugs and sockets? Like the 8 pin tube type but with 9 pins. The
- > ones that are used in Johnson equipment for accessory connections.

Those are called Novals. They are as scarce as hen's teeth these days, but you might try Connector World, 988 Glasco Tpk., Saugertigs, NY 12477, 914-246-3850. If they don't have them, get back to me. I may have another source in my "archives" somewhere.

Good luck & 73, Tony K4KYO

From boatanchors@theporch.com Sat Jul 8 22:21:00 1995

From: k1zat@bah.com

Subject: Re: WWVB decoding

Message-ID: <Pine.SUN.3.91.950708143737.13485B-100000@booz.bah.com>

Tom --

On Sat, 8 Jul 1995 TOM.A.ADAMS@mail.admin.wisc.edu wrote:

> WWVB is on 60 KHz. What's being heard at 100 KHz (actually, 90 - 110 KHz) is > the pulse transmissions of LORAN - A network.

LORAN "A" $\ref{lorange}$ I though "A" was the old occupant of 160 meters many years ago and the stuff on 90-110 KHz is called LORAN "C" .